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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,074	11/26/2003	David C. Long	J-3679A	8629
28165 7590 02/14/2007 S.C. JOHNSON & SON, INC. 1525 HOWE STREET RACINE, WI 53403-2236			EXAMINER KARLS, SHAY LYNN	
			ART UNIT 1744	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE 3 MONTHS			MAIL DATE 02/14/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/723,074

Applicant(s)

LONG ET AL.

Examiner

Shay L. Karls

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3,5-8,10-19,30 and 31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 30 and 31 is/are allowed.
- 6) ☒ Claim(s) 1-3,5-8 and 10-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/25/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| <p>1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br/>Paper No(s)/Mail Date _____</p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413)<br/>Paper No(s)/Mail Date. _____</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application</p> <p>6) <input type="checkbox"/> Other: _____</p> |
|---|--|

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/5/07 has been entered.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 1, 8, 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams in view of Girardot et al. (USPN 6406206), Zayas and Kessel (USPN 6746311).**

With regards to claim 1, Adams teaches a portable powered cleaning device comprising a housing (12) and motor (26) mounted in the housing. The motor comprises a drive shaft (36), which is coupled to a carrier (40). The carrier reciprocates with respect to the housing when the drive shaft is moved. There

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is a cleaning attachment (52) removably attached to the carrier and recesses filled with surface treatment (56) located between the cleaning attachment and the carrier.

With regards to claim 10, the cleaning attachment is made from rubber (col. 2, lines 29-30).

With regards to claims 11 and 12, the surface treatment composition is in liquid, gel or paste form and can be used to clean or polish (col. 2, lines 33-39).

With regards to claim 13, the surface treatment comprises surfactants (detergent) (col. 2, lines 33-39).

Adams teaches all the essential elements of the claimed invention however fails to teach that the surface treatment composition is located in a separate packet wherein the packet is perforated and includes a peel off layer covering the perforations and also that the cleaning attachment is attached to the carrier by a hook and loop fastener connection. Adams also fails to teach that the carrier reciprocates between 3,000 and 10,000 cycles per minute (claim 1 and 8) and that the cleaning attachment is triangular (claim 1).

Girardot teaches a cleaning packet comprising a surface treatment composition (60) such as a cleaning agent (col. 4, lines 6-9) having a peel off layer (40) covering perforations (30). Zayas teaches a cleaning device which comprises a cleaning attachment attached to a carrier by many fastening means such as clips, snaps or hook and loop material (col. 3, lines 29-32). Kessel teaches a rotating cleaning element with a cleaning attachment that reciprocates at 5-10,000 cycles per minute (col. 6, lines 39-45). The cleaning attachment is attached to a carrier by hook and loop material (col. 4, lines 30-38).

It would have been obvious to replace the recesses filled with the surface treatment composition as taught by Adams with the packets as taught by Girardot. Adams clearly teaches the "old way" of using cleaning solutions, by physically refilling a recess with a liquid cleaning solution. Girardot teaches a "new way" of using cleaning solutions, by containing the liquid solution in a prepackaged packet. Using pre-filled packets, prevents spillage that can occur with pouring liquid solutions. Additionally, placing a pre-

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filled package in a recess is faster than filling a recess with a solution. The package will also prevent the user from accidentally coming in contact with a potentially abrasive solution. Using a package with a peel off surface, as taught by Giradot, aids in containment of the surface treatment composition until the packet is ready to be used (col. 1, lines 53-57). This will increase the shelf life of the packets.

Additionally, Adams states that any type of fastener could be used to attach the cleaning attachment (col. 2, lines 40-47), and Zayas teaches that snaps, clips and hook and loop fastening means are interchangeable, it would have been obvious to modify Adams' fastening means so that hook and loop material is used to attach the cleaning attachment. The hook and loop material could either be located on the top surface of the carrier in the place of the existing clips or the hook and loop material could be located on the bottom surface of the carrier and when the packet is placed between the carrier and the cleaning attachment, the cleaning attachment would be connected to the carrier by the hook and loop material not covered by the packet. Additionally, it would have been obvious to modify Adams, Girardot and Zayas' invention to reciprocate at least 3,000 cycles per minute as taught by Kessel to achieve proper cleaning and scrubbing. Also as evidenced by Kessel, a cleaning attachment that is connected to a carrier with a hook and loop material is clearly capable of staying attached when reciprocating at high speeds.

With regards to the limitation that the attachment is triangular shaped, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to make the attachment triangular because Applicant has not disclosed that a triangular shaped attachment provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with round, rectangular or triangular attachments because these shapes perform the same function of cleaning equally well. Therefore, it would have been obvious to one of ordinary skill in the art to modify Adams to obtain the invention as specified in claim 1.

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**Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams (USPN 2590913), Girardot (USPN 6406206), Zayas (USPN 5493749), Kessel (USPN 6746311) further in view of Dickler (USPN 6037319).**

Adams, Girardot, Zayas and Kessel teach all the essential elements of the claimed invention however fail to teach that the surface treatment composition packet is water dissolvable (claim 2) and that the packet is made of polyvinyl alcohol (claim 3). Dickler teaches a liquid dispensing packet made from a water dissolvable material such as polyvinyl alcohol (col. 2, lines 64-66; col. 3, lines 1-7). It would have been obvious to use make the packages of treatment composition of Girardot water dissolvable as taught by Dickler to eliminate waste and furthermore the user would not have to come in contact with any of the treatment composition whether when disposing of a non-dissolvable packet or when refilling a non-dissolvable packet, thus eliminating any injuries that may occur due to the cleaning solution. Also, refilling of a non-dissolvable packet could lead to cross contamination if refilling with a different cleaning solution.

**Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams (USPN 2590913), Girardot (USPN 6406206), Zayas (USPN 5493749), Kessel (USPN 6746311) further in view of Siman (USPN 5701625).**

Adams, Girardot, Zayas and Kessel teach all the essential elements of the claimed invention however fail to teach a rechargeable battery disposed in the housing for powering the motor (claim 5) and a power switch coupled between the battery and the motor (claim 6). Siman teaches a rechargeable battery disposed in the housing for powering the motor (col. 4, lines 54-56) and a power switch (12) coupled between the battery and the motor (col. 2, lines 63-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Adams so that it comprises a rechargeable battery and power switch as taught by Siman since making devices portable and automatic are modifications known in the art. *In re Larson* 144 USPQ 347, 349; *In re Venner* 120 USPQ

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192, 194. Eliminating the power cord from Adams with a rechargeable battery would allow the device to be used anywhere without the need of an electrical outlet.

**Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Adams (USPN 2590913), Girardot et al. (USPN 6406206), Zayas (USPN 5493749), Kessel (USPN 6746311) and Siman (USPN 5701625) and further in view of Kasen et al. (USPN 5937475).**

Adams, Girardot, Zayas, Kessel and Siman teach all the essential elements of the claimed invention however fail to teach an interrupt switch. Kasen teaches an extractor with an interrupt switch (98) located between the motor and the source of electricity. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Adams' cleaning machine to include an interrupt switch as taught by Kasen so that the cleaning attachment of Adams can alternate between reciprocation or no reciprocation without completely turning off the device. This would allow for providing only surface treatment composition to the cleaning surface at times when the cleaning attachment is not to be reciprocated (col. 4, lines 33-50).

**Claims 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams (USPN 2590913), Girardot (USPN 6406206), Zayas (USPN 5493749), Kessel (USPN 6746311) further in view of Siman (USPN 5701625).**

Adams, Girardot, Zayas and Kessel teach all the essential elements of the claimed invention including a plate (40) attached to a bottom side of the carrier (claim 15), with a rubber portion (52) attached to an underside of the carrier plate. Adams however fails to teach the carrier coupled to the drive shaft by a bearing having an outer race fixed with respect to the carrier (claim 14). Adams also fails to teach that the rubber layer is made of foam (claim 16) and that the foam is attached to the carrier plate by hook and loop material (claims 17 and 18). Siman teaches a carrier coupled to the drive shaft by a bearing (7). It would have been obvious to one of ordinary skill in the art at the time the invention was

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made to modify the drive shaft of Adams with the bearings of Siman since ball bearing allow for friction less motion which in turn prevents premature wearing.

With regards to claim 16, Adams teaches using a rubber layer for supporting the cleaning attachment however it is known in the art that foam can be used as a base in cleaning applications for cleaning and polishing. It would have been obvious to use foam as an alternative to the rubber layer since both have similar characteristics such as being sturdy and resilient.

With regards to claims 17 and 18, as stated above in previous rejection, Zayas teaches using hook and loop material as a means for attaching a cleaning attachment to a carrier. Therefore, it would have been obvious to use hook and loop material as the means for adhering the foam layer to the carrier plate.

**Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Adams, Girardot, Zayas and Kessel as applied to claim 1 above and further in view of Super (USPN 6493903).**

Adams, Girardot, Zayas and Kessel teach all the essential elements of the claimed invention however fail to teach a lamp located in the forward part of the housing. Super teaches a cleaning device comprising a headlamp. It would have been obvious to add a head light to Adams, Girardot, Zayas and Kessel's invention so that the area being cleaned can be illuminated to allow for a proper and thorough cleaning of the area.

***Allowable Subject Matter***

Claims 30-31 allowed.

The following is an examiner's statement of reasons for allowance:

Claim 30 teaches a cleaning attachment as well as a scrub brush external to the cleaning attachment that reciprocates in an orbital path. Both the cleaning attachment and the scrub brush are located on a carrier that reciprocates with respect to the housing. The scrub brush comprises an elongated body located between the carrier and the cleaning element. Gruber et al. (USPN 6463615) fails to teach a scrub brush reciprocating in an orbital path. The brush of Gruber just reciprocates back and forth and not



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in an orbit path. While orbital reciprocating brushes are known in the art, the combination of an orbital reciprocating brush having an elongated body located between the carrier and the cleaning element is not known and therefore free from the prior art. It would not have been obvious to modify references to achieve the claimed invention since there is no motivation or teaching to do so.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Response to Arguments***

The examiner would first like to point out that Girardot teaches using cleaning agents as a solution in the packet (col. 4, line 8). Additionally, when the applicant states that Girardot teaches a using the applicator directly in contact with the surface, the cleaning solution is not required to be used in this manner, it is just suggested. It could be used in the same manner as taught by Adams, located under a cleaning sheet or attachment. Adams teaches using an old method of filling recesses with a cleaning solution, by pouring the solution into the recesses before each use. It would have been obvious to use a pre-filled package, like Girardot's, in the recess since it would create consistency with the amount of solution used (no overfill spills) and would also decrease the amount of time required to refill the recess. This type of improvement is already well known with the use of pre-filled dishwasher detergent packages. These packages now allow a user to add an appropriate amount of cleaning solution to the dishwasher without wasting time to measure the exact amount required and also prevent the cleaning solution from coming in contact with the users hands.

Regarding the shape of the cleaning device, the applicant states that since Adams device is rectangular, when in use, the flat front wall is moved back and forth and this can actually jam

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dirt into the corners. The examiner would like to point out that the user is not required to use the device in the manner stated. The user could lead the device with a front corner rather than the flat front wall. Using the device in this manner would allow the corner to be reached by the device and the adjacent flat walls of the cleaning device would not jam dirt into the corner but help to clean the edges adjacent the corner.

The applicant further argues that the hook and loop material could not be used with high speed reciprocation. This is confusing to the examiner since the applicant's own invention operates at a high speed and yet the hook and loop material maintains attachment. However, the examiner has found a reference which teaches high speed reciprocation of a cleaning attachment wherein the cleaning attachment is attached to the carrier by means of a hook and loop material. Thus, the Kessel reference clearly eliminates any doubt that hook and loop material would not be capable to maintaining contact during high speed operations.

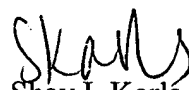
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shay L. Karls whose telephone number is 571-272-1268. The examiner can normally be reached on 7:00-4:30 M-Th, alternating F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Shay L Karls  
Patent Examiner  
Art Unit 1744